

Reply to Office Action
Dated March 25, 2003

Application No. 09/671,089

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Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1 (currently amended). A composition, comprising a peptide having an amino acid sequence substantially as set forth in SEQ ID NO: 2 or 3 ~~and a derivative, fragment, motif, analog or peptidomimetic thereof (MTLP)~~.

Claim 2 (canceled).

3 (currently amended). The composition of claim 1, further comprising an active agent, wherein said peptide ~~the MTLP~~ is complexed to the active agent.

Claim 4 (canceled)

5 (currently amended). The composition of claim 1, further comprising an active particle, wherein said peptide ~~the MTLP~~ is complexed to the active particle.

Claim 6 (canceled).

7 (withdrawn). A method for enhancing movement of an active agent across a lipid membrane, comprising a complex selected from the group consisting of a MTLP-

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active agent complex and a MTLP-active particle complex, wherein the MTLP enhances movement of the active agent across the lipid membrane.

8 (withdrawn). A method for enhancing movement of an active particle across a lipid membrane, comprising a MTLP-active particle complex, wherein the MTLP enhances movement of the active particle across the lipid membrane.

9 (withdrawn). A method for identifying a derivative of a MTLP having enhanced ability to transport an active agent across a lipid membrane, wherein the derivative of the MTLP competes for transport of fMLP across a membrane selected from the group consisting of a cell membrane, an intracellular membrane, the apical and basal membranes of an epithelial cell layer.

10 (withdrawn). The membrane of claim 9, wherein the epithelial cell layer is a polarized epithelial cell layer.

11 (withdrawn). A method for treating a pathological disorder in an animal, comprising orally administering to the animal in need of such treatment a complex selected from the group consisting of a MTLP-active agent complex and a MTLP-active particle complex, wherein an amount of the active agent effective to treat the

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pathological disorder is moved across the gastrointestinal epithelium of the animal into the circulation.

12 (new). A composition to Claim 3, wherein the active agent is a viral DNA particle.

13 (new). A composition according to Claim 12, wherein the DNA is in the form of a MTLP coated liposome.

14 (new). A pharmaceutical composition comprising a peptide according to Claim 1 and a pharmaceutical carrier.

15 (new). A pharmaceutical composition according to Claim 14, adapted for oral administration.

16 (new). A method of diagnosis of a pathological disorder by oral administration, the method comprising administering an effective amount of the composition according to Claim 2, wherein the active agent is a diagnostic agent.

17 (new). A method of identifying the ability a substance to transport an agent across a lipid membrane, the method comprising applying the agent in the absence or presence of the substance and measuring the degree of inhibition.

18 (new). A method according to Claim 17, wherein the agent is the reporter molecule, fMLP.

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19 (new). A composition for use in membrane translocation, the composition consisting of an MTLP comprising an amino acid sequence of SEQ ID NOs. 2 or 3.

20 (new). A composition of Claim 19, wherein said MTLP is complexed to a liposome.

21 (new). A pharmaceutical composition comprising a composition according to Claim 19 and a pharmaceutical carrier.

22 (new). A pharmaceutical composition according to Claim 20, adapted for oral administration.

23 (new). A composition for use in membrane translocation, the composition comprising an MTLP comprising an amino acid sequence of SEQ ID Nos. 2, 3, and 15 to 22, wherein said MTLP comprises D-isomers of amino acids.

24 (new). A composition according to Claim 23, wherein the MTLP is complexed to an active agent to be translocated.

25 (new). A composition according to Claim 23, wherein the MTLP is complexed to an active particle to be translocated.

26 (new). A composition to Claim 24, wherein the active agent is a viral DNA particle.

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27 (new). A composition according to Claim 26, wherein the DNA is in the form of a MTLP coated liposome.

28 (new). A pharmaceutical composition comprising a composition according to Claim 23 and a pharmaceutical carrier.

29 (new). A pharmaceutical composition according to Claim 28, adapted for oral administration.

30 (new). A method of diagnosis of a pathological disorder by oral administration, the method comprising administering an effective amount of the composition according to Claim 23, wherein the active agent is a diagnostic agent.